Estimating Strategic Returns

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INTRODUCTION

If you were transported 100 years into the future, what would be your expected 10-year equity return?

In other words, knowing nothing about the price-to-earnings (PE) level, the shape of the rates curve or the political zeitgeist, what is the intrinsic strategic return of each asset class?

From a tactical viewpoint, returns will vary significantly from these strategic levels. As an example, Figure 1 illustrates the UK 10-year compound return ranging from -2% to +26%. Now, of course, we do have market data which helps us understand whether an asset will be closer to its long-term minimum or maximum. However, these tactical considerations are variations on a strategic 'anchor'.

IDENTIFICATION OF STRATEGIC RISK AND RETURN NUMBERS

For us, the starting point for an asset allocation process is the identification of these strategic risk and return numbers. For those interested in a lot more detail, we recommend reading "Expected Returns" by Antti Ilmanen. Below, we detail our broad methodology. This is not a purely scientific exercise – some judgment is involved. Our methodology combines art and science.

We approach the problem in four ways:

1. The Historical Approach – Using sources such as Ibbotson[1] or Dimson, Marsh and Saunders[2], assuming trailing returns repeat in the future;

2. The Market Approach – Based on { Volatility x Sharpe = Expected Return }. This assumes that volatility is more forecastable than return, and that there is a reasonable expected range of Sharpe ratios;

3. The Risk Premium Approach – How much excess return over the risk-free rate do investors require (i.e. trailing returns may include unanticipated, unrequired return above required returns);

4. The Analytical Approach – For equities, for example, this can be based on Gordon's Growth formula:

{ $p = d / (r - g)$ }, where:

p = value of stock;
d = next year's expected annual dividend per share
r = the investor's discount rate or rate of return
g = expected dividend growth rate.

For fixed income, for example, this can be based on breaking fixed income down into the individual components: { Real Growth + Inflation + Appropriate Spread }.

Figure 1. UK Equity Performance; 10-Year Trailing CAGR

Source: Bank of England, Man AHL, Man GLG. August 1704 to September 30, 2018.

1. Roger G. Ibbotson.
2. Paul Marsh, Elroy Dimson and Nick Saunders.

Following these approaches[3], taking US large-cap equity (S&P 500 Index) as an example, we get the following:

1. Historical Approach: Our data since 1800 suggests annualised volatility of 15.1% and annualised compound return of 8.2%, for a Sharpe of 0.54. However, our preferred lookback period starts in 1970, which we consider long enough to encompass several cycles and inflation regimes and short enough to still be relevant. Since 1970, the S&P 500 Index has returned 9.2% CAGR on monthly annualised volatility of 15.0% for a Sharpe of 0.61 (see Figure 2);

2. Market Approach: Here, the volatility assumption is central. Indeed, our sample data shows remarkable stability in the annualised volatility over different timeframes, pointing to 15%. We assume that in future, the Sharpe degrades on an implicit lower return expectation versus the period since 1970. This is because many of the tailwinds are unlikely to be repeated: inflation, rates, economic volatility and corporate tax rates all fell, while globalisation increased. We assume a Sharpe of 0.5 going forward, not the 0.61 achieved since 1970, but keep volatility constant at 15% (the world is not less or more prone to shocks, in our judgment). This gives an expected return of 7.5% in future;

3. Risk Premium Approach: Ibbotson says the achieved trailing excess return over bonds has been 10% - 5% = 5%. We think that it is likely that not all of the 5% achieved excess return of equity over bonds was truly required, or would be truly required now by equity investors. Data from the Bank of America Merrill Lynch Fund Manager Survey in September says the average expected risk premium for equity is 3.5%. We assume global government bonds' risk-free rate over time is 4% (~nominal GDP, 2% real, 2% inflation). Adding a 3.5% risk premium to 4% risk free return yields US equity returns of 7.5%;

4. Analytical Approach: The US large-cap equity dividend yield is currently 1.8%[4]. Adding in a 1.2% net buyback yield gives a total shareholder yield of 3%. For growth, we note that about 40% of S&P revenues are not US based, according to our calculations. So, for growth we assume 4% nominal in the US, 6% nominal non-US, gives 4.8% of growth. 4.8% growth + 3% yield = 7.8% return expected.

We follow a similar process for other asset classes, which are summarised in Figure 3.

These are strategic estimates, ignoring current conditions.

CONCLUSION

In reality, we know a lot about current conditions and can make tactical variations to these strategic estimates. Most importantly, we know the starting point of valuations, which we can then use to make future return projections. Our strategic return and risk estimates are inputs into our strategic allocations. We deviate from these based on our tactical models and insights.

For instance, today, we believe US equities are overvalued versus equities in the rest of the world. While that has not led to underperformance in recent quarters as earnings have continued to grow, we remain relatively cautious on US equities.

Similarly, our strategic estimate for developed markets (DM) sovereign bond return is 4%, made up of 2% real growth and 2% inflation. But it is clear that German bund yields at 0.36% imply a 10-year nominal return of … 0.36%. This is nowhere near close to the 4% we expect from developed-market sovereign bonds returns in aggregate, in our strategic estimate. As a result, we remain underweight in fixed income overall.

Figure 2. US Equities' Summary Statistics

Longest possible (monthly)	US Equity
Inception	February 1800
# observations	2,620
CAGR	8.2%
Monthly vol. (ann'd)	15.1%
Sharpe	0.54
Pre-1970 (monthly)	**US Equity**
Inception	February 1800
# observations	2,039
CAGR	7.9%
Monthly vol. (ann'd)	15.1%
Sharpe	0.52
Post 1970 (monthly)	**US Equity**
Inception	January 1970
# observations	581
CAGR	9.2%
Monthly vol. (ann'd)	15.0%
Sharpe	0.61

Post 2007 (weekly)	US Equity
Inception	January 2007
# observations	600
CAGR	7.5%
Monthly vol. (ann'd)	17.8%
Sharpe	0.42
Antti Ilmanen	**US Equity**
Range	1990-2009
CAGR	8.5%
Monthly vol. (ann'd)	15.5%
Sharpe	0.55
Forecast	**US Equity**
CAGR	7.5%
Monthly vol. (ann'd)	15.0%
Sharpe	0.50

Source: Man AHL and Man GLG. Further detail available on request.

3. The performance results shown are being provided for illustrative and information purposes only, and should not be relied upon and do not represent, and are not indicative of actual or future performance or the results that may be achieved. Performance may vary substantially from year to year or even from month to month.
4. According to Bloomberg, as of September 30, 2018.

Figure 3. Strategic Asset Class Returns (Historic and Expected)

Longest possible (monthly)	UK Equity	Europe ex UK Equity	US Equity	Japan Equity	EM Equity	Gov. Nominal	Gov. TIPS	EM Debt	Global IG	Global HY	Global Convert.
Inception	Sep 1694	Oct 1882	Feb 1800	Jun 1921	Jan 1988	Nov 1790	Jul 1981	Jan 1994	Jan 1976	Sep 1986	Jan 1994
# observations	3,885	1,628	2,620	1,164	365	2,731	443	293	544	381	293
CAGR	6.4%	11.0%	8.2%	11.4%	10.8%	5.1%	6.3%	8.4%	7.6%	8.3%	5.6%
Monthly vol. (ann'd)	13.1%	13.3%	15.1%	21.0%	22.6%	6.9%	10.6%	12.8%	6.8%	8.0%	8.6%
Sharpe	0.49	0.83	0.54	0.54	0.48	0.75	0.59	0.65	1.12	1.04	0.65

Post 1970 (monthly)	UK Equity	Europe ex UK Equity	US Equity	Japan Equity	EM Equity	Gov. Nominal	Gov. TIPS	EM Debt	Global IG	Global HY	Global Convert.
Inception	Jan 1970	Jan 1970	Jan 1970	Jan 1970	Jan 1988	Jan 1970	Jul 1981	Jan 1994	Jan 1976	Sep 1986	Jan 1994
# observations	581	581	581	581	365	581	443	293	544	381	293
CAGR	9.0%	8.9%	9.2%	7.0%	10.8%	7.3%	6.3%	8.4%	7.6%	8.3%	5.6%
Monthly vol. (ann'd)	21.4%	17.8%	15.0%	17.3%	22.6%	5.4%	10.6%	12.8%	6.8%	8.0%	8.6%
Sharpe	0.42	0.50	0.61	0.40	0.48	1.33	0.59	0.65	1.12	1.04	0.65

Forecast	UK Equity	Europe ex UK Equity	US Equity	Japan Equity	EM Equity	Gov. Nominal	Gov. TIPS	EM Debt	Global IG	Global HY	Global Convert.
CAGR	7.2%	7.2%	7.5%	6.0%	10.4%	4.0%	4.0%	7.0%	4.8%	7.0%	4.8%
Monthly vol. (ann'd)	18.0%	18.0%	15.0%	18.0%	23.0%	6.0%	8.0%	14.0%	8.0%	10.0%	8.0%
Sharpe	0.00	0.40	0.50	0.33	0.45	0.67	0.50	0.50	0.60	0.70	0.60

Source: Man AHL and Man GLG. Further detail available on request.

Teun Draaisma

Portfolio Manager

Teun is a Portfolio Manager for Man Solutions. He joined Man Group in May 2018 and works in partnership with Ben Funnell. He joined the firm from BlackRock, where he was Global Equity Strategist for almost six years, focusing on portfolio management and asset allocation. Prior to this, he was European Equity Strategist at Morgan Stanley from 1997 to 2010, where he ran the award-winning European Equity Strategy team, working with Ben Funnell during their time together at the firm from 1997 to 2006. He has also been a portfolio manager at TT International. Teun holds a Master's degree in Econometrics from Erasmus University Rotterdam.

Ben Funnell

Portfolio Manager

Ben is the lead Portfolio Manager within Man Group's multi-asset offering, covering the GLG Balanced Managed and GLG Stock Market Managed strategies, and the new Man Dynamic Allocation strategy, which he runs in partnership with Teun Draaisma. Previously he was the lead portfolio manager of the GLG European Equity and GLG Global Equity strategies, as well as being GLG's chief equity strategist. Prior to joining GLG he spent 11 years at Morgan Stanley, the last nine of those years on the top II and Extel-rated European Equity Strategy team, which he co-headed in his final three years at the firm. He was educated in modern languages at Durham University, UK.

Henry Neville

Analyst

Henry has been at Man GLG since the beginning of 2016, mainly working as a market strategist. Previously he was an equity analyst at Walter Scott & Partners, a subsidiary of BNY Mellon, and a graduate analyst at Hoare's Bank. He studied History at St. Andrew's University.

IMPORTANT INFORMATION

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